**Dimensional Analysis Practice** Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Directions: Complete the following unit conversions and show all work.**

1. Convert 16.7 inches to feet. (12 inches = 1 foot)
2. Convert 25 yards to inches. (3 feet = 1 yard)
3. Convert 90 centuries to years. (1 century = 100 years)
4. Convert 60 miles to kilometers. (0.6214 mile = 1 kilometer)
5. Convert 4.75 centimeters to meters. (100 centimeters = 1 meter)
6. Convert 9,000 minutes to days.
7. Convert 27 months to fortnights. (30 days = 1 month, 14 days = 1 fortnight)
8. Convert 5 miles to inches. (1 mile = 5,280 feet)
9. Convert your current age in years to seconds.
10. Convert 50 minutes to millennia. (1,000 years = 1 millennium)

**Conversions with Unit Prefixes** Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Directions: Complete the following conversions with the SI unit of length, the meter. Show all of your work and write your answer with the correct units.**

1. Convert 1,000 meters into kilometers.
2. Convert 1,000,000 meters into megameters.
3. Convert 1,000,000,000 meters into gigameters.
4. Convert 0.1 meter into decimeters.
5. Convert 0.01 meter into centimeters.
6. Convert 0.001 meter into millimeters.
7. Convert 0.000001 meter into micrometers.
8. Convert 0.000000001 meter into nanometers.